

**Committee to Minimize Toxic Waste**

January 31, 2001

Ron Pauer, Group Leader  
Environmental Protection  
Environmental Health And Safety Division  
Lawrence Berkeley National Laboratory, MS # 75B-101  
1 Cyclotron Road  
Berkeley, CA 94720

Re: "Stakeholder" Comments on "Revised" Sections of the May 1999 Tritium Sampling and Analysis Plan for the Lawrence Berkeley National Laboratory (LBNL).

Dear Mr. Pauer:

The Task Force was advised that you are to receive "stakeholder" comments on "revised" sections of the LBNL sampling plan by January 31, 2001. You may not be aware that the community's concerns have not received adequate consideration within the Task Force, and consequently, are not reflected in the sampling plan. Most importantly, the central question of the sampling plan, i.e., where to sample and WHY, have not been answered.

We are extremely concerned that LBNL/DOE/US EPA are attempting to fast track the approval of portions of the sampling plan, in other words, unprofessionally, in a piecemeal fashion, and without any technical justification for sampling locations or air monitor placement. Please consider the following:

**I. Air Monitoring**

The most important element of the environmental sampling, the Ambient Air Sampling Plan was not included for our review. This is because LBNL has contracted with U. C. Davis to build a wind tunnel model to "help decide where more air sampling stations be sited". (Task Force 11/16/2000)

The community, on the other hand, has simply requested that LBNL/DOE/US EPA run the CAP 88 dispersion model using correct parameters for stack height, wind speed, etc. to show the potential tritium concentrations in each of the sixteen (16) wind direction sectors and at twenty-five meter intervals up to a 200-300 meter distance from the stack. This will focus the sampling in those areas where tritium contamination is predicted to be the highest. We request that both approaches be considered, i.e., the Davis Wind Tunnel data and CAP 88 data in evaluating the validity of the entire sampling plan, prior to beginning of any actual Sampling. Please note that the tritium stack is located only 110 meters from the Lawrence Hall of Science, which is a children's school and museum and the location of the MEL.

Since the air sampling plan is crucial in the technical justification for the sampling plan as a whole and in determining the sampling locations for soil, vegetation, etc., we



request that LBNL/DOE/US EPA wait for the CAP 88 and the U. C. Davis Wind Tunnel results to arrive before proceeding with any of the other portions of the sampling plan. It would seem to be the most technically prudent and fiscally responsible course to pursue.

## II. Groundwater Evaluation

LBNL's tritium groundwater contamination plume had already reached the site boundary in 1997. In response to this U. C./LBNL/DOE simply moved the Lab's boundary line in order to be able to claim that the tritium groundwater plume is contained within the site boundary. Tritium concentrations in LBNL's groundwater plume have exceeded the U. S. EPA's MCL of 20,000 pCi/L. Further, there are households in Berkeley which have private wells in use. Currently, the City of Berkeley is conducting a comprehensive well survey so as to better understand and utilize this valuable municipal resource. Therefore, it is imperative that LBNL's groundwater data be included in EPA's HRS.

We are enclosing a May 29, 2000 letter sent to LBNL Director Shank, signed by several members of the Task Force. The letter indicates it is essential that the Superfund Sampling Plan include an investigation of groundwater in order that there be a complete evaluation of all exposure pathways (as required by the CERCLA "Superfund" law).

Attached also is the San Francisco Bay Regional Water Quality Control Board's May 1, 2000 letter. Please note that the revisions to be incorporated into the draft final document (Draft Tritium Sampling and Analysis Plan for LBNL, May 1999) have not yet been received and/or incorporated into the Sampling Plan.

In conclusion, we are asking that the existing tritium groundwater data be included and that you not proceed with the Sampling Plan until LBNL/DOE/US EPA have provided both the U. C. Davis Wind Tunnel data and CAP 88 data in order for the Task Force to evaluate whether the currently proposed soil, vegetation, and surface water/sediment sampling sites are adequate or correctly placed.

We are also forwarding a packet of related materials for your review and consideration, including our communications to the Task Force dated 1/16/2001 and 1/17/2001. To facilitate this evaluation, we request that a comprehensive report on the Davis Wind Tunnel experiment and Cap 88 data to be sent and received by the Task Force members, at least two weeks prior to the next Task Force meeting

Sincerely,

Gene Bernardi, Co-Chair CMTW  
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Berkeley, CA 94704

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Attachments to CMTW letter of Jan. 31, 2001 to Ron Pauer, LBNL

- A. CMTW Memo of 1-16-01: to Task Force on Groundwater Sampling and the 12/31/00 TF mtg
- B. TF reps letter of 5-29-00 to CVShank on RWQCB groundwater concerns & inclusion of RWQCB on TF
- C. RWQCB letter of 5-1-00 to Ron Pauer, LBNL, on comments re Draft TSAP
- D. Draft minutes of the 12-13-00 meeting, Subgroup Surface Water and Sediment, TF
- E. CMTW memo of 1-17-01 to TF on Sampling, 5 reasons ... including attachments on Tritiations
- F. CMTW memo of 9-10-00 to LBNL, DOE, EPA on Comments on Sampling Plan "Draft Addendum to CMTW 9/14/00 Comments"
  - Including attachments:
    - 1) Draft Summary of Topical Comment Areas on the Draft Tritium Sampling Plan;
    - 2) CMTW comments on Franke/Greenhouse "General Comments on the Review of Radiological Monitoring at LBNL – Preliminary Technical Report";
    - 3) CMTW priorities for IEER / IFEU;
    - 4) 1997 Summary Tables of Environmental Tritium Measurements – source uncertain (Monheit?)
    - 5) "Radioactive Contamination Chronicle", B. George
    - 6) 1995 Annual Report "California Agreement in Principle" California AIP Program, (apparently excerpted from the LBNL Environmental Restoration Program?)
    - 7) Al-Hadithy, City of Berkeley, letter to Bernardi/CMTW re: Environmental Restoration Program's management meetings.